U.S. Pat. App. Ser. No. 10/532,171 'Attorney Docket No. 10191/3743 Reply to Office Action of March 3, 2006



## Amendments to the Claims:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

## **LISTING OF CLAIMS:**

1-8 (Canceled).

9. (Currently Amended) A device for adaptive distance and speed control in a motor vehicle, comprising:

a sensor device to measure a distance and a relative speed of a target object located in front of the vehicle;

a regulating device having a distance control function to regulate to a specific distance to the target object, the regulating device configured to output temporally changeable actuating variables to actuating elements of at least one of a drive system and a brake system of the vehicle;

a torque dampener configured to limit at least one of: i) the actuating variables, ii) the temporal changes of the actuating variables; and

a dynamic device configured to detect a sudden change in a traffic situation ascertained by the sensor device and to restrict a function of the torque dampener according to the situation, maintaining distance and speed control;

wherein the dynamic device is configured to receive the actuating variables conveyed to the torque dampener and to detect a switch of actuating elements as criterion for the sudden change in the traffic situation based on the actuating variables.

10. (Previously Presented) The device as recited in claim 9, further comprising:

a selection module configured to select the target object for the distance control and to signal to the dynamic device a change in the target object, the change in target object being a criterion for the dynamic device for detecting the sudden change in the traffic situation.

11. (Canceled).

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12. (Currently Amended) The device as recited in claim 9, A device for adaptive distance and speed control in a motor vehicle, comprising:

a sensor device to measure a distance and a relative speed of a target object located in front of the vehicle;

a regulating device having a distance control function to regulate to a specific distance to the target object, the regulating device configured to output temporally changeable actuating variables to actuating elements of at least one of a drive system and a brake system of the vehicle;

a torque dampener configured to limit at least one of: i) the actuating variables, ii) the temporal changes of the actuating variables; and

a dynamic device configured to detect a sudden change in a traffic situation ascertained by the sensor device and to restrict a function of the torque dampener according to the situation, maintaining distance and speed control;

wherein the dynamic device is configured to restrict or suspend the function of the torque dampener when a switch of actuating elements takes place immediately following a change in the target object.

- 13. (Previously Presented) The device as recited in claim 12, wherein, in the switch of the actuating elements, the dynamic device suspends or restricts the torque dampening only for an old actuating element.
- 14. (Previously Presented) The device as recited in 12, wherein the dynamic device fully reactivates the torque dampener with a time delay following the switch of actuating elements.
- 15. (Currently Amended) The device as recited in claim 9, A device for adaptive distance and speed control in a motor vehicle, comprising:

<u>a sensor device to measure a distance and a relative speed of a target object located in</u>
<u>front of the vehicle;</u>

a regulating device having a distance control function to regulate to a specific distance to the target object, the regulating device configured to output temporally changeable actuating variables to actuating elements of at least one of a drive system and a brake system of the vehicle;

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a torque dampener configured to limit at least one of: i) the actuating variables, ii) the temporal changes of the actuating variables; and

a dynamic device configured to detect a sudden change in a traffic situation ascertained by the sensor device and to restrict a function of the torque dampener according to the situation, maintaining distance and speed control;

wherein the torque dampener is configured to restrict positive and negative accelerations of the vehicle, represented by the actuating variables, and time derivatives, to associated limit values in each case, and the restriction of the function of the torque dampener includes a change in the limit values.

16. (Previously Presented) The device as recited in claim 15, wherein the dynamic device modifies the limit values as a function of an evaluation variable, which is a measure for dynamics of the traffic situation.

17. (New) The device as recited in claim 15, wherein the dynamic device is configured to receive the actuating variables conveyed to the torque dampener and to detect a switch of actuating elements as criterion for the sudden change in the traffic situation based on the actuating variables.

18. (New) The device as recited in claim 12, wherein the dynamic device is configured to receive the actuating variables conveyed to the torque dampener and to detect a switch of actuating elements as criterion for the sudden change in the traffic situation based on the actuating variables.